

WHAT IS CLAIMED IS:

1. An antimicrobial composition comprising an antimicrobial active and an anionic surfactant mixture having a characteristic selected from the group consisting of:
 - a. a linear alkyl chain having a chain length of from about C₄ to about C₁₂ and a total head group size of at least about 4 Angstroms;
 - b. a branched alkyl chain having a chain length of from about C₄ to about C₁₂;
 - c. an unsaturated alkyl chain having a chain length of from about C₄ to about C₁₂;
 - and
 - d. combinations thereof.
2. An antimicrobial composition comprising:
 - a. from about 0.2% to about 70% of an organic acid; and
 - b. from about 0.1% to about 40% of an anionic surfactant mixture having a characteristic selected from the group consisting of:
 - i. a linear alkyl chain having a chain length of from about C₄ to about C₁₂ and a total hydrophilic head group size of at least about 4 Angstroms;
 - ii. an unsaturated alkyl chain having a chain length of from about C₄ to about C₁₂;
 - iii. a branched alkyl chain having a chain length of from about C₄ to about C₁₂; and
 - iv. combinations thereof.wherein said composition is characterized by a pH of from about 2.0 to about 4.5.
3. The composition of claim 2, further comprising a calcium ion scavenger.
4. The composition of claim 2, further comprising an anti-foam agent.
5. The composition of claim 2, wherein said anionic surfactant is selected from the group consisting of: alkyl glyceryl sulfonate, branched alkyl glyceryl sulfonate, alpha sulfo fatty acid, alpha olefin sulfonate, branched alkyl sulfonate, branched alkyl benzene sulfonate, secondary alkyl sulfate, mono ester of alkyl sulfosuccinic acid, alkyl isethionate, alkyl amidosulfonate, branched alkyl phosphonate, branched alkyl phosphate and combinations thereof.

6. The composition of claim 2, further wherein said anionic surfactant is substituted with a substituent selected from the group consisting of: sulfonate, sulfate, phosphonate and combinations thereof.
7. The composition of claim 2 wherein said organic acid is selected from the group consisting of: pyroglutamic acid, adipic acid, gluconic acid, gluconolactone acid, glutamic acid, glutaric acid, glycolic acid, tartaric acid, ascorbic acid, benzoic acid, salicylic acid, citric acid, malic acid, succinic acid, lactic acid carboxymethylcellulose and combinations thereof.
8. The composition of claim 2 wherein said organic acid is characterized by a pKa of greater than about 3.0.
9. The composition of claim 3 wherein said calcium ion scavenger is selected from the group consisting of: carboxymethylaspartic acid, citric acid, malic acid, polyacrylic acid, copolymer of acrylic acid and maleic acid, oxydisuccinic acid, nitrilotriacetic acid, iminodisuccinic acid, succinic acid, tartrate disuccinic acid, tartrate monosuccinic acid, ethylenediaminetetraacetic acid, pyrophosphoric acid and combinations thereof.
10. The composition of claim 3 wherein said calcium ion scavenger is characterized by a pKa of lower than about 3.0.
11. The composition of claim 3 wherein said calcium ion scavenger is characterized by a calcium ion binding constant log P of greater than about 3.0 at a pH 3.
12. The composition of claim 4 wherein said anti-foam agent is selected from the group consisting of silicone emulsion, mineral oil emulsion, hydrocarbon oil emulsion, polyalkylene emulsion and combinations thereof.
13. The composition of claim 4 wherein said anti-foam agent is present in an amount of at least 1 ppm by weight of total composition.
14. The composition of claim 4 wherein said anti-foam agent is characterized by the structure of dimethyl silicone or a hydrocarbon moiety in oil in water emulsion.

15. The composition of claim 2, further comprising a nonionic agent.
16. The composition of claim 15, wherein said nonionic agent comprises a substituent selected from the group consisting of: alcohol, polyol, phenol, chloro phenol, polyphenol and combinations thereof.
17. The composition of claim 15, wherein said nonionic agent is branched, linear, unsaturated and combinations thereof.
18. The composition of claim 15, wherein said nonionic agent comprises a chain length of from about C₄ to about C₁₂.
19. The composition of claim 15, wherein said nonionic agent is selected from the group consisting of: 1-(2-ethylhexyl) glycerol ether, octyl glycerol ether, 2-(2-ethylhexyloxy) propanol, octyloxy-propanol, 1-(2-ethylhexyloxy) ethanol, octyloxy ethanol, 1,2-hexylenediol, 1,2-cyclohexanedimethanol, isopropyl glycerol ether, 4-chloro-3-xenol and combinations thereof.
20. The composition of claim 15, wherein said nonionic agent is present in an amount of about 0.1% to about 10% by weight of total composition.
21. The composition of claim 2, further comprising an alkyl poly ether-type emulsifier.
22. An antimicrobial product comprising the antimicrobial composition of claim 2.
23. The antimicrobial product according to claim 22, wherein said product is a personal care product.
24. The personal care product according to claim 23, wherein said personal care product is selected from the group consisting of: hand soaps, hand sanitizers, body washes, shower gels, shampoos, body lotions, feminine care products, foot care products, deodorants, pet care products and combinations thereof.

25. The antimicrobial product according to claim 22, wherein said product is a household care product.
26. The household care product of claim 25, wherein said product is selected from the group consisting of hard surface cleaners, deodorizers, fabric care compositions, fabric cleaning compositions, manual dish detergents, automatic dish detergents, floor waxes, kitchen cleaners, bathroom cleaners and combinations thereof.
27. The antimicrobial product according to claim 22, wherein said product is selected from the group consisting of: a wipe product suitable for personal care use and household cleaning; a toilet tissue; a towel for hand drying, household drying and household cleaning; a facial tissue; a skin care composition; a first aid or surgical antiseptic; a diaper; a feminine napkin; and combinations thereof.
28. The skin care composition according to claim 27, further comprising a dermatologically acceptable carrier for said antimicrobial composition.
29. A method of killing bacteria, said method comprising the steps of topically applying the composition of claim 2 to an area in need of treatment and, optionally, removing said composition following its application.
30. A method of inactivating viruses, said method comprising the steps of topically applying the composition of claim 2 to an area in need of treatment and, optionally, removing said composition following its application.
31. The method of claim 30, wherein said viruses are selected from the group consisting of: rotavirus; rhinovirus; coronavirus; respiratory syncytial virus; and combinations thereof.
32. A method of providing residual antibacterial efficacy, said method comprising the steps of topically applying the composition of claim 2 to an area in need of treatment and, optionally, removing said composition following its application.
33. A method of preventing and/or treating a common cold, respiratory disease and diarrhea in a mammal where said diseases are caused by rhinovirus, rotavirus, coronavirus,

respiratory syncytial virus and combinations thereof, said method comprising the steps of topically applying the composition of claim 2 to an area of the mammal in need of treatment and, optionally, removing said composition following its application.

34. A method of preventing and/or treating bacteria-related diseases in a mammal that result from said mammal's contact with a bacteria-infected substrate, said method comprising the steps of topically applying the composition of claim 2 to an area of the mammal which is infected with said bacteria and, optionally, removing said composition following its application.
35. A method of reducing inflammation, said method comprising the steps of topically applying the composition of claim 2 to an area in need of treatment, and optionally, removing said composition following its application.
36. The method according to claim 41, wherein said inflammation is caused by a source selected from the group consisting of: plants, diaper rash, insect bites, allergic inflammatory reactions and combinations thereof.
37. A method of preventing inflammation, said method comprising the steps of topically applying the composition of claim 2 to an area for which the prevention of inflammation is desired, and optionally, removing said composition following its application.